Commonwealth of Kentucky

Environmental and Public Protection Cabinet Department for Environmental Protection Division for Air Quality 803 Schenkel Lane

803 Schenkel Lane Frankfort, Kentucky 40601 (502) 573-3382

STATE ORIGIN AIR QUALITY PERMIT

Issued under 401 KAR 52:040

Permittee Name: Leggett Partners, L.P.

Mailing Address: P.O. Box 4037, Winchester, KY 40392

Source Name: Leggett and Platt, Inc.

Mailing Address: Same as above

Source Location: 805 North Maple Expressway, Winchester, KY 40391 and

101 New Street, Winchester, KY 40391

Source ID #: 21-049-00019

Agency Interest #: 816

Regional Office Frankfort Regional Office

643 Teton Trail, Suite B Frankfort, KY 40601-1758

(502) 564-3358

County: Clark

Permit Number: S-05-075 Activity ID: APE20040001 Log Number: 55761 & 56125

Permit Type: Minor Source Operation

Application

Complete Date: February 12, 2004
Issuance Date: May 12, 2005
Expiration Date: May 12, 2015

John S. Lyons, Director Division for Air Quality **Permit Number:** <u>S-05-075</u> **Page:** <u>1 of 11</u>

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction and operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify an affected facility without first having submitted a complete application and received a permit for the planned activity from the Division, except as provided in this permit or in 401 KAR 52:040, State-origin permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining other permits, licenses, or approvals that may be required by the Cabinet or other federal, state, or local agencies.

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

EP16 is located at 805 North Maple Expressway

EP16 This emission point is for <u>Heat Treating Oven</u>.

EP16 is a Process Heating Corp. Batch Oven with a 1.5 MM Btu/hr Maxon 415 Oven pak burner.

Maximum steel wire input quantity for EP16 has been listed as 62000 lbs/day.

EP16 is located at 805 North Maple Expressway. Operation at 101 New Street is also permitted since the two locations are one source.

Construction Commenced: February 2004

This oven has no control device for particulate and opacity emissions.

APPLICABLE REGULATIONS:

Regulation **401 KAR 59:010**, New process operations applicable to each affected facility associated with a process operation which is not subject to another emission standard with respect to particulates in Chapter 59 of 401 KAR commenced on or after July 2, 1975.

Operating Limitations:

401 KAR 59:010

The following limits shall apply to assure compliance with Emission Limitations #1 and #2.

1. No oil or mineral spirits shall be applied to objects entering this oven.

Emission Limitations:

401 KAR 59:010

- 1. Section 3(1) limits visible emissions from each unit to less than 20% opacity.
- 2. Section 3(2) limits emissions of particulate matter from each unit to a maximum of 2.34 lbs/hr

Compliance Demonstration Method:

- 1. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen, then the opacity shall be determined by Reference Method 9 test. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
- 2. Compliance with Operating Limitation #1 has been assumed to demonstrate compliance with particulate matter emissions limitation of 2.34 lbs/hr.

Testing Requirements:

Testing shall be conducted at such times as may be required by the cabinet in accordance with Regulations 401 KAR 59:005 Section 2(2) and 401 KAR 50:045 Section 4.

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Monitoring Requirements:

N/A

Record Keeping Requirements:

The permittee shall keep a log of all opacity observations including date and time.

Reporting Requirements:

401 KAR 59:010

As part of compliance demonstration for Emission Limitations #1 and #2, the permittee shall report any deviations from permit requirements (including approximate length of time) by this emission unit as specified in Section C.

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EP14 is located at 101 New Street

EP14 This emission point is for <u>Heat Treating Oven with exhaust incinerator</u>.

EP14 is a Porbeck manufacturing 25' Batch Oven with a 2.0 MM Btu/hr Porbeck burner modified to 36'.

Maximum steel bedspring input quantity for EP14 is listed as 410 units/hr.

Prior to going to the oven, a small percentage of products receive a coating of Lubricant (Vulcan Oil). For these products, particulate, opacity and odor emissions are controlled by Wisconsin Oven exhaust incinerator with 3.0 MM Btu/hr burner.

EP14 is located at 101 New Street. Operation at 805 North Maple Expressway is also permitted since the two locations are one source.

The oven is loaded with a batch. The doors are shut and the oven temperature immediately starts to rise. When a preset temperature is reached (approximately 450° F), the burner shuts off and the oven cools down. When the temperature is low enough, an operator opens the oven doors and unloads the batch

EP14 construction commenced: 1999

EP14 moved to 101 New Street and modified: November 2000

APPLICABLE REGULATIONS:

Regulation **401 KAR 59:010**, New process operations applicable to each affected facility associated with a process operation which is not subject to another emission standard with respect to particulates in Chapter 59 of 401 KAR commenced on or after July 2, 1975.

Regulation 401 KAR 53:010, Ambient air quality standard, applies since odor problems may be associated with operation of this emission unit.

Operating Limitations:

1. No mineral spirits shall be applied to objects entering this oven.

The control device operates only when the oven processes bedsprings with a coating of Lubricant (Vulcan oil) and as a result the following Operating Limitations become applicable to assure compliance with <u>Emission Limitations #1 - #3</u>.

- 2. When the oven is heating up and the oven temperature is above 290° F, the exhaust incinerator chamber temperature shall be at least 1400° F.
- 3. The oven exhaust incinerators shall operate normally at a temperature of at least 1400° F for a minimum of 2.9 minutes after the oven temperature reaches preset.

Note: Oven shutoff occurs when the oven temperature reaches preset, which normally ranges between 440 and 470°F. However in some circumstances (ex. Cooler ambient temperatures or a heavy load of springs) the permittee may keep the burner on to maintain oven temperature through the soak cycle.

4. The oven and exhaust incinerator shall be maintained in accordance with the manufacturer's recommendations unless otherwise required in this permit.

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Limitations:

401 KAR 59:010

- 1. Section 3(1) limits visible emissions from process operations to less than 20% opacity.
- **2.** Section 3(2) limits emissions of particulate matter from process operations to a maximum of 2.34 lbs/hr.

Compliance Demonstration Method:

- 1. The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack on a weekly basis and maintain a log of the observations. If visible emissions from the stack are seen, then the opacity shall be determined by Reference Method 9 test. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
- 2. Compliance with the operating limitation(s) has been assumed to demonstrate compliance with particulate matter emissions limitation of 2.34 lbs/hr.

401 KAR 53:010

3. At any time when 1 volume unit of ambient air is mixed with 7 volume units of odorless air, the mixture must have no detectable odor.

Compliance Demonstration Method:

If deemed necessary, the Cabinet shall require testing in accordance with methods prescribed by the cabinet. Otherwise, compliance with <u>Operating Limitations #2 - #4</u> has been assumed to demonstrate compliance.

Testing Requirements:

Testing shall be conducted at such times as may be required by the cabinet in accordance with Regulations 401 KAR 59:005 Section 2(2) and 401 KAR 50:045 Section 4.

Monitoring Requirements:

The following is required as part of compliance demonstration for <u>Operating Limitations #2</u> and #3.

1. The exhaust incinerator chamber temperature on EP14 shall be continuously monitored by a low temperature alarm designed to go off in the event the exhaust incinerator chamber temperature goes below 1400° F after the oven temperature passes 290° F until 2.9 minutes after the oven temperature reaches preset.

Record Keeping Requirements:

1. The permittee shall keep a log of all opacity observations including date and time.

Applicable only when the oven processes parts that are lubricated

The following is required as part of compliance demonstration for Emission Limitations #1 and #2.

- 2. The amount, times and dates of lubricant application shall be recorded.
- 3. The control equipment operation times and dates shall be recorded.
- **4.** All low temperature alarm activity shall be recorded.

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SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- 5. Oven and oxidizer temperatures shall be recorded continuously when oven doors are closed and the oven is operating and include date and time.
- 6. All oven and oxidizer temperature programming shall be recorded and include date, time, and person doing the programming.
- 7. All maintenance and corrective actions taken as part of compliance with Operating
 Limitation#3 shall be recorded and include date and time.

Reporting Requirements:

As part of compliance demonstration for Emission Limitations #2 - #4, the permittee shall report any alarm activity for this emission unit as specified in Section C.C, Reporting Requirements. A statement confirming that the oven was programmed in accordance with Operating Limitations #2 and #3 and notification of any deviations from permit requirements (including approximate length of time) shall be reported as specified in Section C.C.

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SECTION C - GENERAL CONDITIONS

A. Administrative Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:040, Section 3(1)(b) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.

- 2. This permit shall remain in effect for a fixed term of ten (10) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:040, Section 15]
- 3. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Material incorporated by reference by 401 KAR 52:040, Section 1a, 11].
- 4. Pursuant to materials incorporated by reference by 401 KAR 52:040, this permit may be revised, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance shall not stay any permit condition [Material incorporated by reference by 401 KAR 52:040, Section 1a, 4,5].
- 5. This permit does not convey property rights or exclusive privileges [Material incorporated by reference by 401 KAR 52:040, Section 1a, 8].
- 6. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:040 Section 11(3)].
- 7. All previously issued permits to this source at this location are hereby null and void.

B. Recordkeeping Requirements

- 1. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of at least five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [401 KAR 52:040 Section 3(1)(f)].
- 2. The permittee shall perform compliance certification and recordkeeping sufficient to assure compliance with the terms and conditions of the permit. Documents, including reports, shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

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SECTION C - GENERAL CONDITIONS (CONTINUED)

C. Reporting Requirements

1. a. In accordance with the provisions of 401 KAR 50:055, Section 1, the permittee shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:

- i. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
- ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
- b. The permittee shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Reporting Requirement condition 1. a. above), the probable cause of the deviation, and corrective or preventive measures taken; to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report [Material incorporated by reference by 401 KAR 52:040, Section 5, 3].
- 2. The permittee shall furnish information requested by the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the permit [Material incorporated by reference by 401 KAR 52:040, Section 1a, 6].
- 3. Summary reports of monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.

The summary reports are due January 30th and July 30th of each year. All deviations from permit requirements shall be clearly identified in the reports. All reports shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

D. <u>Inspections</u>

- 1. In accordance with the requirements of 401 KAR 52:040, Section 3(1)(f) the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times. Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation.

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SECTION C - GENERAL CONDITIONS (CONTINUED)

b. To access and copy any records required by the permit.

- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit.
- d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

E. Emergencies/Enforcement Provisions

- 1. The permittee shall not use as defense in an enforcement action, the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Material incorporated by reference by 401 KAR 52:040, Section 1a, 3].
- 2. An emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency and included a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- 3. Emergency provisions listed in General Condition E.2 are in addition to any emergency or upset provision contained in an applicable requirement [401 KAR 52:040, Section 22(1)].
- 4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 52:040, Section 22(2)].

F. Compliance

- 1. Periodic testing or instrumental or non-instrumental monitoring, which may consist of record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstration of continuing compliance with the conditions of this permit. For the purpose of demonstration of continuing compliance, the following guidelines shall be followed:
 - a. Pursuant to 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation at any time an affected facility for which the equipment and measures are designed is operated, except as provided by 401 KAR 50:055, Section 1.
 - b. All the air pollution control systems shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers. A log shall be kept of all routine and nonroutine maintenance performed on each control device.

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SECTION C - GENERAL CONDITIONS (CONTINUED)

c. A log of the monthly raw material consumption and monthly production rates shall be kept available at the facility. Compliance with the emission limits may be demonstrated by computer program, spread sheets, calculations or performance tests as may be specified by the Division [401 KAR 50:055, Section 2].

- 2. Pursuant to 401 KAR 52:040, Section 19, the permittee shall certify compliance with the terms and conditions contained in this permit by January 30th of each year, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Regional Office listed on the front of this permit in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period, and
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
 - f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality

Division for Air Quality

Frankfort Regional Office Central Files
643 Teton Trail, Suite B
803 Schenkel Lane
Frankfort, KY 40391 Frankfort, KY 40601

- 3. Permit Shield A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with all:
 - (a) Applicable requirements that are included and specifically identified in this permit; or
 - (b) Non-applicable requirements expressly identified in this permit [401 KAR 52:040, Section 11].

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SECTION D - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:040, Section 6. While these activities are designated as insignificant the permittee shall comply with the applicable regulation and any level of periodic monitoring specified below.

	<u>Description</u>	Generally Applicable Regulation
1.	Butt and spot welding (no gases, fluxes or electrodes used)	401 KAR 59:010 (PM) 401 KAR 63:010 (Fugitive)
	(no gases, nuxes of electrodes used)	401 K/ K(05.010 (1 ugitive)
2.	Aerosol spray can painting	401 KAR 59:010 (PM)
	(New St. – 0.5 gals/day; Maple Expwy - 0.5 gals/day)	401 KAR 63:010 (Fugitive)
3.	Transmission oil tank – 0.019 psia	401 KAR 59:010 (PM)
	(New St. – 275 gals; Maple Expwy – 55 gals)	401 KAR 63:010 (Fugitive)
4.	Vulcan Oil tank -	401 KAR 59:010 (PM)
	0.039 psia (New St. – 2000 gals)	401 KAR 63:010 (Fugitive)
5.	Diesel fuel tank - 1.0 psia (New St	401 KAR 59:010 (PM)
	10,000 gals; Maple Expwy – 275 gals)	401 KAR 63:010 (Fugitive)